SECURITY CODED CAR RADIOS

Many modern car stereo systems have built-in anti-theft facilities ranging from removable front panels and displays to security coding and even complete removal of the radio from its cage. In the case of the security coded sets, originally pioneered by Philips, a special code number (a copy of which is contained inside a microchip within the radio) must be entered before the radio will operate. The idea being that if the radio is stolen, it cannot be used unless the secret code is known, so there is not much point in stealing it in the first place. This idea in itself is quite a good one. However, there is a downside in that people do tend to forget their code numbers, which does not usually present any problems at first – until the car battery goes flat. It is then that the problems arise, people entering wrong codes into the radio causing it to lock up etc. The fact is that most radios need decoding for perfectly legitimate reasons and not because they have been stolen!

Our company has been involved in the servicing and repairing of car stereo equipment for many years and we quickly realised the need to be able to decode a radio before it could be serviced. It soon became apparent that similar companies all over the world must be facing the same problems, so, it was decided to manufacture an expandable decoding system to suit individual requirements.

The Joule A-400 decoding system was designed specifically for this purpose, not only to read security codes and reset the time locks but also permit the changing of these codes if required. For instance, the code number of a customer's radio could be changed to the last few digits of his/her telephone number – a number that would probably never be forgotten.

Another feature of the A-400 is its ability to fully re-program the code chip within the radio. This is very useful when the data stored in this device has become corrupted causing improper operation of the radio.

It is also possible to program blank memory chips. These devices could then be supplied to service departments that do not have their own decoding equipment.

Here in the UK, the A-400 car radio decoding system has become a standard piece of test equipment found in many service departments and other small businesses. Several units have also been supplied to the Police who are now, in many cases, able to return stolen car radios to their rightful owners by using the security code as additional identification.

THE HARDWARE

The Joule A-400 is a fully integrated car radio decoding system utilising the latest technology in digital electronics and computer software and is manufactured solely in the UK by Joule Electronics. The equipment has been designed to be very easy to use although sophisticated enough to deal with the decoding of many brands of car radios, cassettes and CD players. In the majority of cases, the decoding of a radio can be accomplished within a matter of minutes.

Some of the many features of the system are as follows: -

The unit, measuring 175 mm wide by 125 mm deep by 55 mm in height and weighing only 510 grams, operates on volts dc which can be obtained from either a small ber power supply (provided) or a vehicles electrical supp making the unit ideal for mobile decoding using a lap-computer. The circuitry within is protected against reve polarity and draws very little quiescent current. Connect to the PC is made using the RS232 serial cable provid The software is available in modular form (please refer the enclosed price list for details) and may be run directly from floppy disk or can be copied to the PC's hard disk using the installation program supplied. All leads, probes and data pods are supplied with each software module as necessary and are included in the respective prices.

e circuitry within the A-400 is built on a high quality double led glass fibre printed circuit board and high quality components e employed throughout the design.

comprehensive manual is supplied with the system covering all pects of program installation and operation.

The A-400 simply connects to the computers serial port and is software configurable to operate on either COM1 or COM2 as required.

There are 4 status LED's on the front panel of the unit giving indication of power on, AUX power on, ready and busy.

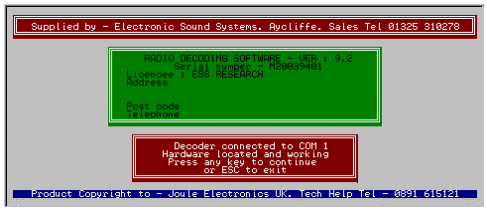
There is a convenient 12 volt computer controlled AUX power output connector on the rear panel of the A-400, used for supplying current to the processor based radios that need to be powered up whilst being decoded.

The unit also bears the CE mark of electromagnetic compatibility – a requirement by law.

THE SOFTWARE

The software is designed to run on any PC ranging from a 286 to a Pentium 166 and is DOS based. It can however be run from a DOS shell within Windows 95 or 98.
Two levels of password protection are available within the software which can be activated at any time preventing unauthorised use of the equipment. The passwords can be defined as ‘owner’ and ‘user’ respectively.
A history file logs the total number of successful decodes per radio type and can be reviewed or reset at any time only by the person(s) having access to the master password. For additional security, the licenced users Name and Address will appear on the licensee screen every time the system is run. Once entered, the Name field cannot be removed and only the Address information can be changed after correct entry of the master password.
The software is fully menu driven and has been written to make navigation through the various programs as easy as possible.

Once the program is loaded, the licensee screen will be displayed. From here, entering the master password will permit entry into the various system functions menu where certain parameters can be changed.



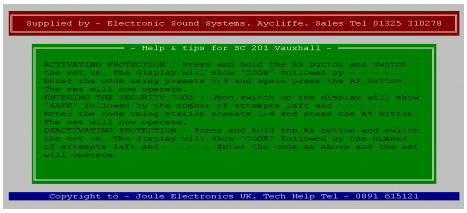
Licensee Screen

Main Menu Screen

Pressing the ENTER key at the licensee screen will load the Main Menu screen where you can select the make of radio that you wish to decode.

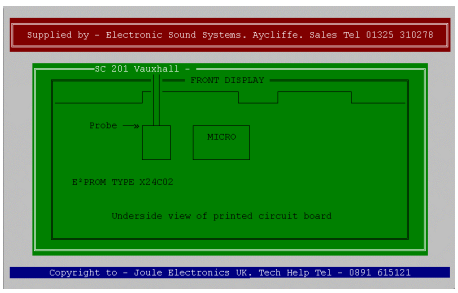
After making your selection, a further screen listing the all available models will be displayed. From this screen you select the required model. You can now either choose to view the help screen, PCB layout screen or proceed to decode the radio.

Model Selection Screen



Typical Help Screen

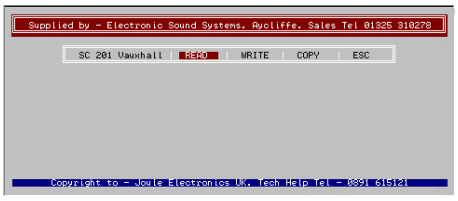
The help screen displays information on how to enter the code into a radio once the decoding process is complete. Also, information is supplied on how to activate or de-activate the code where applicable.



PCB Layout Screen

The PCB layout screen displays information as to where to place the probe on the radios printed circuit board. Any other relevant decoding information will also be displayed here.

Pressing the ENTER key on the selected model will take you to the decode screen where various options will be available i.e. READ, WRITE, COPY.

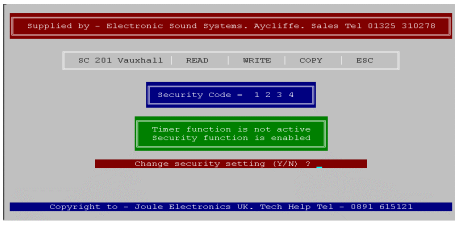


Make Your Selection

Read Function Selected

Selecting READ will prompt you to fit the appropriate data pod and probe into the A-400 and to place the probe on the radios PCB.

Pressing the ENTER key will now display the code and will automatically unlock the radio if a previous (incorrect) code has been entered. The WRITE option (after displaying the original code) will permit changing the code to a number of your customers choice. Selecting COPY will permit the re-programming of the code chip in the event that it's data has become corrupted.



Code Is Read

GENERAL

All software modules are supplied complete with data pods, leads and probes.
If you purchase a system from us, your company details will be held on our database enabling us to keep you informed of future software updates as they become available. In many cases when updates are a continuation of existing modules, they are supplied for a small handling charge of £25.00 + Vat.

We guarantee our decoding equipment against faulty workmanship or component failure for a period of twelve months from the original date of purchase and our service policy is to get you up and running again as quickly as possible – if you do have problems that is!

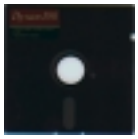
STARTER KIT

We have put together an inexpensive package containing everything you will need to decode a variety of popular radios at the special introductory price of £495.00 + carriage and Vat. This kit will decode ALL of the models on the following pages that are highlighted in RED – **that's well over one hundred of them** and represents excellent value for money. Connect this kit to the serial port of any PC, connect the power supply and you are ready to start your decoding business – it really is that simple! Using a lap top computer and taking the system on the road for mobile decoding at your customers own premises can lead to even greater profitability.

If you wish, to get you started, we can provide you with an even more cost-effective solution to your decoding requirements – the INDEX system. With this system you receive ALL available software modules which are covered in the following pages (please refer to page 12 for more information on the INDEX system).

The software can be supplied on the following formats: -

[1] 5.25" High density 1.2 MB disks.



[2] 3.5" Double density 720 KB disks or
[3] 3.5" High density 1.44 MB disks.

[4] CD ROM

Please state the format you require and also whether the serial port on your PC is a 9 or 25 pin type.

STARTER KIT MODULE

PHILIPS	PHILIPS CONTINUED	
SC201 MK1	DC349	
DC401	DC710/60B-61B	
DC411	DC594/60E/R760	
DC501	DC449/62	
DC505	DC459/62S	
DC511	DC449/64L	
DC515	DC710/64S	
DC570	DC588/71	
DC579	DC593/62L	
DC652	DC481/62	
DC658	DC962/62	
DC661	DC722/65	
DC670	DC982/72B	
DC679	DC594/60S/R860	
DC680	DC479/62	
DC681	DC594/62S	
DC682	DC461/62T	
DC695	DC451/62L	
VC708	DC465/65	
DC711/60E	DC349/60B	
DC720	DC465/35	
DC730	DC710/65B	
DC740	DC594/60B/R770	
DC774	DC710/61E	
DC794	DC459/62E	
SC804 MK1	DC451/62E	
DC882	DC449/72L	
DC891	DC710/60S	
DC924	DC589/71	
DC964	DC461/62E	
DC983	DC594/65	
R950	DC459/62L	
S200	RC200/65	
DC785	RC200/35	
DC731	DC741/60E	
R750	DC942/62	
DC710/60E	DC785/24E	
R710	CE-3435	
DC741	DC279/62L	
SC804 MK2	DC449/64S	
SC201 MK2	DC711/00B	
DC984	DC259/62	
DC577	RC248/80	
DC379		

STARTER KIT MODULE CONTINUED

FORD STD.	VOLVO	HITACHI
2001	VC608	CSK706V
2002	VC708	CSK402
2005	VC602	CSK452
2017	CR906	CSK313V
2015	CR902	
ECU2	CR702	
EP32S	TD603	
ESRT32PS	VC601	
2008 4 PRESET	SC700	
2008 MK2 6 PRESET	CR708	
2008 MK3 6 PRESET	CR901	
	CR905	
	SC805	
	CR504	
	SC802	
	SC900	
	CR502	

STARTER KIT MODULE CONTINUED

J.V.C.	PANASONIC	
KSRX4400	CQ-LM0120A	
KSRG5	CQ-LM5120A	
KSC1200	CQ-LM3320A	
KSRG6	CQ-LP1420L	
KSRG7	CQ-LM220A	
KSRG8	CQ-LM191A	
KSRG9	MODEL G10	
KDLX3R	MODEL G15	
	CQ-LP2820Z	
	CQ-LP3720F	
	CQ-LP1320L	
	CQ-LP2620Z	
	CQ-LM0920A	

STARTER KIT MODULE CONTINUED

BLAUPUNKT STD.	BLAUPUNKT CONTINUED	
BOSTON CC20	HONDA 39100ST3E01	
BOSTON CC22	BMW REVERSE	
BOSTON SQM-20	HONDA 200R	
CAMBRIDGE SQM-39	HONDA 150R	
CAMBRIDGE SQR-39	RENAULT 7646 120 391	
CAMBRIDGE CC-31	NASHVILLE DJ	
CASABLANCA SQR-49	COBURG SQR-49	
DUSSELDORF SQR-49	ALPHA 7647 236 060	
FREIBURG SQR-39	NISSAN 7642 772 318	
GRANADA SQR-49	LYON RCM-106P	
HEILBRON SQM-39		
LUBECK CC-20		
MELBOURNE SQM-39		
MELBOURNE SQR-39		
MELBOURNE SQR-49		
VERONA CR-31		
VERONA CR-43		
CITROEN PF1(A)		
RENAULT G4A/G4B		
RENAULT X4		
HONDA XQD100750		
CITROEN PF1(B)		
ACD-9431		
NISSAN BP9480		
ROVER 39100SK8E10		
NISSAN 28113Q910		
HONDA 39100SN7E11		
VIENNA RCR46P		
ANCONA CR-24		
BMW BAVARIA C11		
NISSAN MODEL C		
ROVER 39100SN8-E00		
TRIER CC31		
NISSAN 2811372J05		
ESSEN CR-31		
ROVER 39100SN8E10		
ACR SKODA		
NISSAN 7642 773 018		
BOSTON RCC-45		
ACM5451		
HONDA XQD100-760		
NISSAN 281139F900		
ACR3251		

SOFTWARE MODULES CONTINUED

PHILIPS 2	FORD RDS	GRUNDIG STD.
DC751	D92FB18K876AA	SC201
DC752	91FB18K876AA	SC804
DC755	92FB18K876AA	3904
DC842	D92FB18K876BA	OPEL SC303
DC864	93FB18K876GB	2841VD
VC700	94FP18K876DA	2670
	93AB18K876AB	AD182H
	94FB18K876JA	3201
	F3RF18K876AD	3301
	2040 CD PLAYER (SONY)	3841
	2008 (6 PRESET)	3803
	2014	3905
	2008 TWIN TUNER	3670
	94FP18K876AA	3704
	94FP18K876EA	3703
	94FP18K876KA	3000
	94FB18K876BA	MS201A
		AD182H2
		4804
		4805
		3805
		3680
		3842
		2014
		AD185H
		AURA
		EC4000

SOFTWARE MODULES CONTINUED

CLARION	CLARION CONTINUED	CLARION CONTINUED
CDC6300	CDC6700R	PN9726U
CMX230	PN9484L	PN9939U
CMX270	PU9845A	PU9636A
CRH60	PP9484H	PU9597A
CRH61	PN2056U	PT9653U
CRH70	ISUZU TROOPER	PU9593A
CRH81	PU9836A	CRX77R
CRH83	CT439	PI9413N
CRX62	CK953	PU9970A
CRX63R	VAR9317	PU9990A/B
CRX72	VAR9318	PU1560B
CRX74	PU9469A	PU1570B/C
CRX91	9700IF	PU9903A
CRX111R	9700IG	PU9907A
FL51	PU9275A	PU9940U
FL55	PU957A	PU9844A
FL61	PU9252A	PU9837A
FL557	940HP	PU9983B
PN9728F	FL900	PN9526U
PU9594A	960HX	PP9940H
PU9680A	PE9093A	PU9715A
PU9694B	PU9357A	PU9887A
986MX11	PU9358A	PU1559A
CDC6000	PU9386	PU2294A
PU9833A	FL540	FL610
PN9273U	PN9228F	PU1562A
PE9414A	PU9536A	PU1561A
PP9410L	PU9535A	ADX5555RZ
CRX67R	PU9637A	PU9706A
971HX	PU9534A	
PU9676A	PU9548	
CRH81R	PU9492A	
PN2064U	VAR9149	
PN9410F	PU9654B	
PEUGEOT RDS DIV	PU9427A	
CRX91R	PU9664A	
DISCOVERY	FL440	
PN9483L	PU9667A	
FL742	9700IE	
PU9879A	PU9843A	
PU9590B	950HX	
PU9679A	PU9971A	
CRX75R	PU9549A	

SOFTWARE MODULES CONTINUED

BLAU MICRO MOD 1	BLAU MICRO MOD 1 CON.	BLAU MICRO MOD 2
MEMPHIS SQR88	MADRID RCM105	KINGSTON DJ
CDP09	LONDON RDM42	HONDA 39100ST3E11
KINGSTON SQR48	BOLOGNA RCR126	OSLO RCC24
MONTREUX RDR49	VERONA SKODA	HEILBRONN RCC24
BREMEN SQR49	KOLN RCM40	MONTREAUX RCR44
PARIS RCR41/RCR42	HONDA 7643 023 390	VANCOUVER RCR44
ATLANTA SQR49	MUNCHEN CD43	SYDNEY RCM85
PEUGEOT PF3/C	MUNCHEN RD104	CITROEN PF1
SEVILLA RD104	LONDON RDM104	CITROEN 3021
ROVER 39100SN8E20	LONDON RDM43	
CITROEN PH1/C	HAMBURG RCM104	
PARIS RCM104	PEUGEOT PF3(C+)R	
FRANKFURT RCM82	AUDI 7644 894 380	
MELBOURNE CR42/CR43	FRIEBURG CR43	
VAUXHALL CD300	MONTREUX RCM45	
CASABLANCA CM62	RENAULT 7644 495 091	
MUNCHEN CD41	VAUXHALL CDC-2	
NISSAN 7642 775 318	AUDI 7645 240 380	
HONDA 39100SV4E00	BARCELONA RCM104	
RENAULT G5(B)	AUDI 7645 245 380	
BREMEN RCM43	AUDI 7644 858 380	
MONTREAL CR40	NISSAN 7646 341 318	
VAUXHALL SC202		
BMW REVERSE RDS		
VAUXHALL CAR300		
MILANO RCR45		
TORONTO RCM40		
STOCKHOLME RCR42		
BARCELONA RCM83		
NEW YORK SCD08		
NISSAN 7642 775 318		
NISSAN 7642 785 318		
PASADENA DJ		
NISSAN 7643 775 318		
SYMPHONY		
CANBERRA RCM85		
NISSAN 7646340318		
NISSAN 7646345318		
VERONA RCR45		
CAMBRIDGE RCR45		
HEIDELBERG RCM40		
AUDI 7645 245 390		
BARCELONA CM102		

SOFTWARE MODULES CONTINUED

GRUNDIG MICRO MOD 1	VAUXHALL	NEW BLAUPUNKT
VAUXHALL SC303	R100	VW BETA B
4871	CAR200	PEUGEOT T1 LOW
3851	CAR400	PEUGEOT T1 TOP
VAUXHALL 4870	CCR600	VW GAMMA C
5500	CCR800	PEUGEOT T1 NIV 2
VAUXHALL SC804(B)	CAR400 MK2	VW BETA 4
GRUNDIG MICRO MOD 2	CCR600 MK2	VW GAMMA D
3870	DELCO CDR500	VW BETA
SEAT 4880		FIAT PUNTO LOW
6400		FIAT PUNTO MID
6500		ROVER 7649 262 042
SEAT 3880		
BMW BAVARIA 3883		
BETA 4		
GRUNDIG MICRO MOD 3		
5201 INFOMAT		
SOUND 4000		
SOUND 4000A		
BETA 5		
BETA 5 MK2		
SMART CC		
SMART RADIO		
SCD5390		
SCD5690		
5300		
5600		

SOFTWARE MODULES CONTINUED

TOYOTA	PIONEER	DAEWOO & HINARI
1667	KEH5080	DAEWOO 5073WKG
13703	KEH6080	DAEWOO 5073WKY
CE1070	KEH8080	DAEWOO H810XE
CE2770	KEXM700	DAEWOO AKF8817R
1669	KE91ZBM	HINARI A490
13701	KEH9080	HINARI KR42
13706	9000RDS	
13704	DEH66	
13702	KEX500	
TM6000CR	KEHM8246ZT	
	DEX77	
	KEX900	
	DEH2006	
	KEXP8256ZT	

SOFTWARE MODULES CONTINUED

KENWOOD	BECKER	BECKER CONTINUED
KRC 758R	BE 0729	BE 3317
KRC 759R	BE 1100	CDR 32
KRC 856	BE 1105	BE 2380
KRC 857	BE 1150	BE 4113
KRC 859R	BE 1151	
KRC 954	BE 1305	
KRC 956	BE 1310	
KRC 957	BE 1318	
KRC 958R	BE 1350	
KRC 1054R	BE 1430	
KDC 7050R	BE 1431	
KDC 7060R	BE 1432	
KRC 858W	BE 1560	
KDC 8060R	BE 1650	
KDC 7070R	BE 1801	
KRC 777R	BE 1803	
KRC 877R	BE 0794	
KDC 8070R	BE 0836	
KDC PS907	BE 2010	
KDC PS9060R	BE 2011	
KDC PA707	BE 2020	
KRC PS959R	BE 2035	
KDC 9050R	MD 2197	
KMD PS970R	BE 2210	
KDC PS9070R	BE 2330	
KRC PS1077R	BE 0837	
KRC 778R	BE 0839	
KRC 678R	BE 3200	
KDC 5080R	MF 2297	
KDC 6080R	BE 1110	
KDC 7011	BE 0774	
KRC 578R	BE 4367	
KRC PS978R	BE 2130	
KDC 7080R	BE2230	
KRC 878R	BE 0749	
	BE 2180	
	BE 3136	
	CDR 22	
	CR 11	
	BE 3100	
	BE 1470	
	CDR 21	
	BE 4377	

SOFTWARE MODULES CONTINUED

MISC SOFTWARE		FORD MICRO MOD 1
MAZDA 3262		2006 TYPE MASK 004
MAZDA 3263		2006 TYPE MASK 006
FISHER AX853		2006 TYPE MASK 008
FISHER AX843		TRAFFIC 5000 MASK 004
PYE CCE701		**FORD MICRO MOD 2**
GELHARD GXR257		2006 TYPE MASK 003
HYUNDAI H810SE		2006 TYPE MASK 104
CHRYSLER PO4704345G		2006 TYPE MASK 105
24LC16 UTILITY PROGRAM		2006 TYPE MASK 107
24LC32 UTILITY PROGRAM		2006 TYPE MASK 103
ALFA ROMEO 932		2006 TYPE MASK 108
ALPINE MF2199		
MITSUBISHI DX3SE		
ALPINE MF2197		
MITSUBISHI MR141228		
PYE CCE702		
CHRYSLER PO5269484		
MITSUBISHI DX254P		
ALPINE MF2910		
ALPINE 7983R		
ALPINE 1310R		
ALPINE 7286L		
MITSUBISHI MB942704		
CHRYSLER PO4858543		
CHRYSLER PO4859504		
CHRYSLER PO4858513		
ALPINE 7982R		
PORSCHE CR1		
MATSUSHITA CQLM0920		
JAGUAR AJ9500R		
CHRYSLER PO5269485		
JAGUAR AJ9100R		
JAGUAR AJ9150R		
JAGUAR AJ9200R		
SAAB CMS80-1		
SONY XRM500R		
HYUNDAI H850YE		
SONY CDXM600R		
BOSE CM839R0		
SONY XRM700R		
AUTOSOUND A800		
ALPINE XQD101390LNF		

U.K. PRICE LIST NOW INCLUDES THE LATEST VERSION 9.6 SOFTWARE

If you are considering purchasing the entire system as listed below then you will qualify for an automatic discount of almost 30 percent, reducing the price from £4941.00 to £3500.00 – a saving of £1441.00.

STARTER KIT [INCLUDES ALL MODULES HILIGHTED IN RED] ***	**£495.00**
PHILIPS 752 MODULE	£50.00
FORD RDS	£125.00
GRUNDIG STANDARD	£99.00
TOYOTA	£99.00
PIONEER	£99.00
CLARION	£99.00
NEW VAUXHALL	£50.00
BECKER	£99.00
KENWOOD	£99.00
HINARI & DAEWOO	£25.00
MISC	£198.00
NEW BLAUPUNKT	£99.00
GRUNDIG MICRO MOD 1	£225.00
GRUNDIG MICRO MOD 2	£225.00
GRUNDIG MICRO MOD 3	£300.00
FORD MICRO MOD 1	£199.00
FORD MICRO MOD 2	£99.00
FORD MICRO 4 TRAFFIC 3000 and 4000 HAND HELD DECODER	£450.00
BLAUPUNKT MICRO MOD 1	£1300.00
BLAUPUNKT MICRO MOD 2	£99.00
DELCO CDR500	£99.00
TA3 INTERFACE & PROBE REQUIRED FOR FORD MICRO MOD 2 AND/OR DELCO CDR500	£149.00
PROBE P-7 FOR BLAUPUNKT MOD 1 AND/OR GRUNDIG MOD 2	£95.00
PROBE P-9 FOR BLAUPUNKT MOD 2	£65.00
BLAUPUNKT MICRO MOD 1 PROGRAMS MAY BE PURCHASED	
SEPERATELY IF REQUIRED – PLEASE CONTACT OUR SALES	
DEPARTMENT FOR PRICING INFORMATION.	

All above prices quoted are U.K. sterling and exclude carriage and Vat.
Carriage in the U.K. is charged at £7.50 for the full system.

RUNNING THE DEMONSTRATION SOFTWARE

[1] If you received the demonstration software on disk, place the disk in the computers drive A: (or drive B) as required. From the DOS C: prompt, type A:demo and press enter.
[2] If you downloaded the software from the Internet, a directory called Joule will have been created on drive C: The demo software will then have been copied into this directory as a self extracting executable file which can be run directly by typing demo at the C:\Joule directory.
The first screen to appear is a simulated license box, which has previously been filled in with default data for the purpose of this demo. Pressing a key at this point will display another box containing information for password entry. (Please note, this box is for information only and is not displayed with the operational version of this software). You now have the option of pressing enter, to load the main menu screen, or pressing the key combination [SHIFT+F1] which will permit changing of the user data i.e. address, telephone number, post code etc after entry of the master password. The password for this demo software is DEMO. At the main menu screen you will see certain sections hilighted. Moving the hilight bar using the arrow keys to one of the hilighted areas, and pressing the enter key, will permit entry into a sub-menu containing the models available for that selection. Please note, for the purposes of this demonstration, only the Philips and Blaupunkt micro software will run. Once the sub-menu is displayed, you then have several options available as follows: - F1 for help, F2 to display the PCB layout screen, F3 for general help, or pressing the enter key to move on to the decode screen. At the decode screen there are 3 further options: - READ, WRITE or COPY. Selecting either option will simulate what actually happens with the operational version of this software.
It should be noted that this demo will also simulate a typical ‘bad read’ by occasionally displaying INVALID as the security code – an event that could occur when the data on a particular radios code chip is corrupted, or when the probe is not connecting properly etc.

THE INDEX READING SOFTWARE

If you are still unsure as to whether you should purchase your own decoding system outright, then there is an alternative option which our R&D department have developed. This comprises special software which works on the following principle: - For £340.00* + carriage and Vat we will supply you with the A-400 decoder, all necessary hardware and the index software covering every available model of radio on our decode list.
When you read, write or re-program the code chip in a radio, the system will generate a special code number known as an index number which you may then either telephone, fax or email to us at your convenience. If telephoning, you will be given the security code in exchange for the index number within seconds – and that's all there is to it!
The cost of this service is £5.00 per code number supplied (£10.00 for the Blaupunkt micro range) and it is up to you as to how much you charge your customers. As a guideline however, you could realistically be charging £10 - £15 for the basic models and £25 - £35 for the top of the range RDS units. This obviously leaves you with a substantial profit margin for very little outlay – and, you have 30 days from the date of invoice before having to pay us.
Incidentally, when you are invoiced, you will also receive a breakdown analysis of the code numbers that you have received enabling you to keep track of every transaction.

There are no hidden charges and there is no rental fee – you only pay for index codes when you actually use the system and, please remember, you will have the facility to decode literally hundreds of radio types including the latest RDS models manufactured by Philips, Grundig, Ford and Blaupunkt etc.

There is also another advantage in using the index system in that whenever we release software updates for the system, you will automatically receive yours first – and at no charge. We do this simply for one good reason and that is, the more software you have, the more profitable the system becomes for us both.

Another option is to purchase part of the software outright i.e. the most popular models (your choice). We can then arrange to supply you with the remaining software on the index system. There will however be a charge to cover the cost of any additional probes and data pods in this case.
Many of our customers have already taken advantage of this valuable offer and purchased the starter kit with the rest of the software on the index system.
Whichever option you decide to take, please remember that at any time in the future you also have the option to purchase any of the software modules that are currently on the index system.

I feel sure that you will agree that with a small amount of advertising this could well prove to be an excellent opportunity for starting, or indeed expanding a small business with the minimum of capital outlay and a potentially high return in your investment.

* If you require the TA3 interface and probe for decoding the Ford Micro Module 3 and Delco CDR500, there is an additional charge of £149.00.

THE NEW X3000 DECODER

The X3000 decoder has been specifically designed to enable the Ford Traffic 3000 and 4000 radios to be decoded. It is a stand alone extremely simple to use device requiring only two connections – one to the radio and one to a 12 volt power source. Connection to the radio is made simply by plugging in at the 2 pin port at the rear of the set – no soldering and no panels to remove.

The unique feature of the X3000 is it's ability to unlock the radio even if LOCK 13 is displayed. Until now, a radio displaying LOCK 13 would have to be returned to Ford for replacement – a very costly and time consuming method of decoding a radio.

For this reason alone we recommend a standard decode charge to your customers of £35.00.

All operations of the X3000 are performed simply by pressing one or two keys on the integral keypad, guided by information displayed on the 16 character 2 line L.C.D.
Another feature of the X3000 includes password protection by a 4 digit pin number which must be entered after powering up, to prevent unauthorised access.
Please contact our sales department on +44 (0)1325 310278 or fax us on +44 (0)1325 300189 if you wish to place an order.

Specifications :

Supply Voltage : 12volts dc.
Measurements : Width 88 mm Height 145 mm Depth 22 mm.
Weight : 370g

Price : £450.00 U.K. Sterling + Shipping and V.A.T. where applicable.

LATEST SOFTWARE RELEASE

FOR THE FORD RDS and DELCO CDR500

We now have the software available for decoding the Ford RDS radios with the processor masks 003, 104, 105 and 107 and the Delco CDR500.

This software is supplied complete with the TA3 interface and 68 way PLCC probe assembly as illustrated.

The prices are as follows:-

Probe and interface unit £149.00
Ford software £99.00
Delco software £99.00
Index Version £149.00

TA3 INTERFACE AND 68 WAY PLCC PROBE

Please contact our sales department for further information if required. If you wish to place an order please allow up to 10 days for delivery.
The above prices are exclusive of carriage and VAT

NEW PRODUCT

FORD RESET UNIT TYPE UL13

The Joule UL13 Ford Reset Unit is designed to unlock a Ford 5000, 6000 or 7000 radio even if all attempts have been used up i.e. the radio is displaying ‘lock 13’. After unlocking a radio, a further 13 attempts at code entry will be available and all that is then required is to enter the correct code.

PLEASE NOTE : This unit will NOT read the security code of the radio. However, the codes can be obtained from most Ford dealers or from ourselves.

There are only three connections to make in all:- One from the Reset Unit to the radio and two to a suitable 12 volt power source. After powering up, the radio will be reset in a matter of seconds.

The device is completely self contained – no computer is necessary and absolutely no technical knowledge is required. The software required to control the unit is contained within an internal microprocessor and is fully automatic in operation.

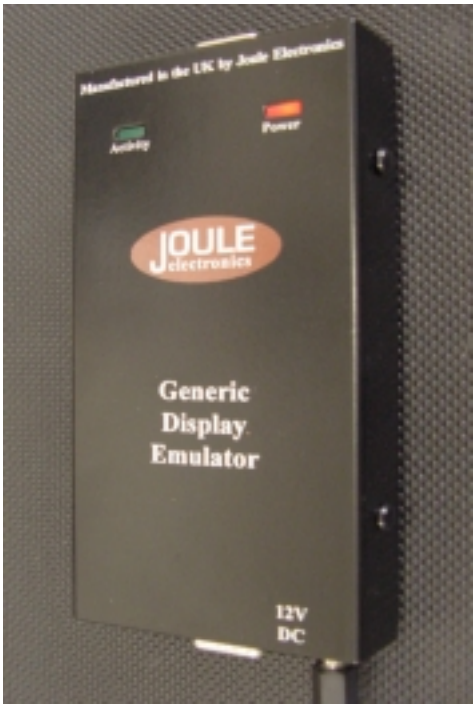
The device will unlock a 5000, 6000 or 7000 series radio regardless of the processors program mask number.

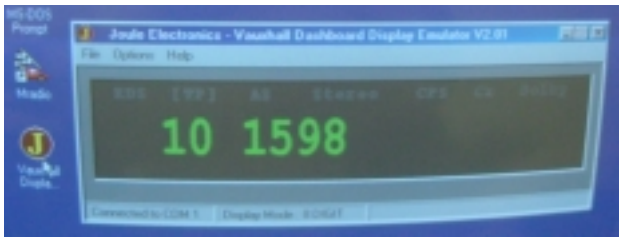
- Only three connections to make.
- Supplied with interface and power supply leads.
- **Only £95.00 + Delivery & Vat.**

NEW PRODUCT

DISPLAY EMULATORS

The Joule Generic Display Emulator is a device that enables a display-less car radio/cassette or CD such as the Delco CDR-500 to be tested in the workshop (e.g. after decoding or repair) by connecting it's display output to your computer, obviating the need for expensive and difficult to obtain remote displays and cable harnesses.





There are only three connections to make to the Emulator :- A connection to your PC's serial port, a connection to the radios display output connector and finally a connection to a 12 volt dc power source.

To operate the Emulator, simply click the icon on the desktop of your PC – all the information that would normally be displayed on the radios remote display will now appear on your computers screen in a window.

There is no need to select either eight or ten digit display modes on the radio you are testing as the Emulator does this automatically for you. The display mode that the radio is currently switched to is shown on the computer screen.

It should be noted that future Vauxhall radios will not have the facility to have their display modes changed, so using the standard remote displays may not always work correctly.

- Simple to use Windows software – compatible with 95, 98, 2000, NT.
- Only three connections to make.
- Auto senses eight or ten digit mode of operation – future proof. (Vauxhall unit)
- Supplied with serial cable, interface cable, power supply lead and software.
- **Only £59.00 + Delivery & Vat.**
- **Renault (Philips) Display Emulator now available at £95.00 + Delivery & Vat.**

We are currently in the process of developing more Display Emulators to cover the ever increasing range of car audio systems that employ remote displays including Rover etc.